

In the Claims

1. ( Amended ) A resistor having a resistance that can be adjusted by current being passed there through and which is formed as part of a semiconductor device comprising:

a polycrystalline silicon resistor formed of and on a layer, wherein said polysilicon resistor is formed using a doping wherein said doping has a concentration of from  $\sim 6 \times 10^{19} \text{ cm}^{-3}$  to  $\sim [3.75] 1 \times 10^{20} \text{ cm}^{-3}$  and wherein said polycrystalline silicon resistor has at least a first and second order temperature coefficient, wherein the sign of said first and second order temperature coefficients are opposite each other; and

wherein said resistor resistance is electronically trimmable within a range from 60% to 30 % of original value and

further wherein said [doping] dopant consist essentially of Phosphorus. [produces a fine grain size and an increased grain boundary density]

2. (Previously Amended) A resistor having a resistance that can be adjusted by current being passed there through and which is formed as part of a semiconductor device comprising:

a polycrystalline silicon resistor formed of on a layer, wherein said polysilicon resistor is formed using a doping wherein said doping has a concentration of less than  $\sim 3.75 \times 10^{20} \text{ cm}^{-3}$  and wherein said polycrystalline silicon resistor has at least a first and second order temperature coefficient, wherein the sign of said first and second order temperature coefficients are opposite each other; and

CONFIRMATION

CONFIRMATION

wherein said resistor resistance is electronically trimmed trimmable within a range from 60% to 30 % of original value and

further wherein said dopant consist essentially of Phosphorus. [doping produces a fine grain size and an increased grain boundary density ].

3 – 10. (Cancelled)

11. ( Amended) A resistor having a resistance that can be adjusted by current being passed there through and which is formed as part of a semiconductor device comprising:

a polycrystalline silicon resistor formed of on a layer, wherein said polysilicon resistor is formed using a dopng wherein said doping has a concentration of greater than  $\sim 6 \times 10^{19} \text{ cm}^{-3}$  and wherein said polycrystalline silicon resistor has at least a first and second order temperature coefficient, wherein the sign of said first and second order temperature coefficients are opposite each other; and

wherein said resistor resistance is electronically trimmed trimmable and further wherein said dopant consist essentially of Phosphorus. [doping produces a fine grain size and an increased grain boundary density]

12. ( Amended) A resistor having a resistance that can be adjusted by current being passed there through and which is formed as part of a semiconductor device comprising:

a polycrystalline silicon resistor formed of on a layer, wherein said polysilicon resistor is formed using a late implant doping technique and wherein said polycrystalline silicon resistor

CONFIRMATION

CONFIRMATION

5 has at least a first and second order temperature coefficient, wherein the sign of said first and  
6 second order temperature coefficients are opposite each other; and  
7 wherein said resistor resistance is electronically trimmed trimmable and  
8 further wherein said dopant consist essentially of Phosphorus. [doping produces a fine  
9 grain size and an increased grain boundary density .]

13 – 15. (Cancelled)

CONFIRMATION

CONFIRMATION